## **CLAIMS**

- 1. A high frequency radio transceiver able to communicate on at least a first high frequency and a second high frequency, wherein said first high frequency is dedicated to a first telecommunication net and said second high frequency is dedicated to a second telecommunication net.
- 2. A high frequency radio transceiver of claim 1 being able to scan pre-selected channels of a plurality of nets and having a unique self address in each net.
- 3. A high frequency radio transceiver of claim 2 wherein said plurality of nets includes between 2 and 20 nets.
- 4. A high frequency radio transceiver of claim 1 wherein said high frequencies are within a frequency range of from about 2 MHz to about 30 MHz.

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- 5. A high frequency radio transceiver of claim 1 comprising a multi-net task manager for coordinating scanning and sounding on each of said nets.
- 6. A high frequency radio transceiver of claim 5 wherein the multi-net task manager assesses quality of links using a bidirectional function applied to all available channels of all nets.
- A method of scanning a plurality of nets using the high frequency radio transceiver of claim 6 comprising the steps of:
  putting said high frequency radio transceiver into multi-net scanning mode;
  scanning channels of first net;
  scanning channels of second net;
  scanning channels of other nets that said transceiver is compatible with in turn.
  - A method of scanning a plurality of nets using the high frequency radio transceiver of claim 7 wherein only nets assigned to multi-net operation are scanned.

- 9. A method of scanning a plurality of nets using the high frequency radio transceiver of claim 8 wherein said transceiver listens to an appropriate channel and hears a call signal having an address, and said call signal will only be answered when said address matches a self address of said transceiver.
- 10. A method of scanning a plurality of nets using the high frequency radio transceiver of claim 7 wherein scanning operation on each net is performed in accordance with directives of MIL STD188-141B standard.
  - 11. An arrangement of high frequency transceivers comprising a plurality of individual nets, each of said nets containing a plurality of high frequency transceivers enabled to communicate at a plurality of pre-selected high frequency channels dedicated to that net, wherein at least one of said transceivers is able to communicate with transceivers on different nets.

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12. The arrangement of Claim 11 including a bidirectional feature for assessing quality of links between said transceivers on said plurality of dedicated preselected high frequency channels on said different nets.